

Pyelonephritis in a cat with feline lower urinary tract infection

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Signalment & History: A 1-year-old, intact male, weighing 3.3kg Russian blue was admitted for partial anorexia, depression, vomiting and dysuria for 3 days.

Results: There were leukocytosis, hyperkalemia and severe azotemia on the blood profiles. Hematuria and struvite crystalluria were identified in urine collected by cystocentesis. Abdominal radiographs showed bilateral renomegaly and distended urinary bladder. Abdominal ultrasonographs described mild hydronephrosis of bilateral kidneys, irregularly thickened urinary bladder wall and dilated urethra. The patient was diagnosed as feline lower urinary tract infection (FLUTI). As the symptoms of the patient developed and progressed gradually without response to medical treatment except for relieving azotemia, he presented hyperthermia and bacteriuria after one week. At the same time, pelvic dilation of the right kidney was moderately increased and pericapsular contour began to become irregular. And hypoechoic free fluid was accumulated and spread out to the right retroperitoneal space in serial ultrasonographic evaluations. Pyelonephritis was considered on ultrasonographic findings. Circumferential hypoechoic fluid seen around the right kidney revealed subcapsular fluid with concurrent tears of the renal capsule on excretory urogram. After nephrectomy of the right kidney and urethrostomy, the patient had good recovery.

Clinical Relevance: Ultrasonography is an excellent tool for evaluating urinary system. In this case, severe pyelonephritis of the right kidney was induced by lower urinary tract infection and there was no response to medical treatment. Serial ultrasonographs have an important role in evaluating the response to medical therapy and deciding the surgical option.

Key words: pyelonephritis, FLUTI, ultrasonographs, cat

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